

CLAIMS

1. A method for the preparation of a printing plate comprising ink-jet printing an oleophilic image on a surface of a support by applying to the support an aqueous solution or aqueous colloidal dispersion of a polymer having water-solubilising groups wherein the water-solubilising groups interact with the surface of the support thereby binding the polymer to the support and rendering the polymer insoluble, characterised in that the aqueous solution or aqueous colloidal dispersion of polymer comprises pigment particles dispersed therein.
2. A method as claimed in claim 1 wherein the water-solubilising groups are ionisable acid groups.
3. A method as claimed in claim 2 wherein the water-solubilising groups are selected from the group consisting of carboxylic and sulfonic acid groups.
4. A method as claimed in claim 1 wherein the polymer is selected from polyesters and polymers prepared by the polymerisation of ethylenically unsaturated monomers.
5. A method as claimed in claim 1 wherein the polymer is a sulfonated polyester.
6. A method as claimed in claim 1 wherein the polymer is present in the aqueous solution or aqueous colloidal dispersion in the range 0.02 to 8 % by weight
7. A method as claimed in claim 1 wherein the pigment is selected from an azo, monoazo, disazo, β -naphthol, naphthol AS, benzimidazolone, disazo condensation, metal complex, isoindolinone, isoindoline, polycyclic, phthalocyanine, quinacridone, perylene, perinone, , thioindigo, anthrapyrimidone, flavanthrone, anthanthrone, dioxazine, triarylcarbonium, quinophthalone and diketopyrrolo pyrrole pigment, azo pigment lake, titanium oxide, iron oxide and carbon black.
8. A method as claimed in claim 1 wherein the pigment is selected from C.I. Pigment Blue 15:3, C.I. Pigment Red 122, C.I. Pigment Yellow 155, C.I. Pigment Yellow 74, C.I. Pigment Black 7 and bis(phthalocyanylalumino)tetraphenyl disiloxane.

9. A method as claimed in claim 1 wherein the particle size of the pigment is in the range 10 to 100 nm.
10. A method as claimed in claim 1 wherein the pigment is present in an amount from 0.1 to 10% by weight, based on the weight of the aqueous solution or aqueous colloidal dispersion of polymer.
11. A method as claimed in claim 1 wherein the support is selected from metallic, paper-based and polymeric supports wherein the surface of the support is treated or coated to provide the necessary interaction with the polymer.
12. A method as claimed in claim 11 wherein the support is coated with a hydrophilic layer of a crosslinked cationic polymer.
13. A method as claimed in claim 11 wherein the support is metallic and has an oxidised surface.
14. A composition suitable for the preparation of a printing plate by inkjet printing comprising an aqueous solution or aqueous colloidal dispersion of a polymer having water-solubilising groups, characterised in that said aqueous solution or aqueous colloidal dispersion further comprises pigment particles dispersed therein.
15. A composition as claimed in claim 14 wherein the water-solubilising groups are ionisable acid groups.
16. A composition as claimed in claim 15 wherein the water-solubilising groups are selected from the group consisting of carboxylic and sulfonic acid groups.
17. A composition as claimed in claim 14 wherein the polymer is selected from polyesters and polymers prepared by the polymerisation of ethylenically unsaturated monomers.
18. A composition as claimed in claim 14 wherein the polymer is a sulfonated polyester.
19. A composition as claimed in claim 14 wherein the polymer is present in the aqueous solution or aqueous colloidal dispersion in the range 0.02 to 8 % by weight

20. A composition as claimed in claim 14 wherein the pigment is selected from an azo, monoazo, disazo, β -naphthol, naphthol AS, benzimidazolone, disazo condensation, metal complex, isoindolinone, isoindoline, polycyclic, phthalocyanine, quinacridone, perylene, perinone, , thioindigo, anthrapyrimidone, flavanthrone, anthanthrone, dioxazine, triarylcarbonium, quinophthalone and diketopyrrolo pyrrole pigment, azo pigment lake, titanium oxide, iron oxide and carbon black
21. A composition as claimed in claim 14 wherein the pigment is selected from C.I. Pigment Blue 15:3, C.I. Pigment Red 122, C.I. Pigment Yellow 155, C.I. Pigment Yellow 74, C.I. Pigment Black 7 and bis(phthalocyanylalumino)tetraphenyl disiloxane.
22. A composition as claimed in claim 14 wherein the particle size of the pigment is in the range 10 to 100 nm.
23. A composition as claimed in claim 14 wherein the pigment is present in an amount from 0.1 to 10% by weight, based on the weight of the aqueous solution or aqueous colloidal dispersion of polymer.
24. A printing plate obtainable by as method as claimed in claim 1.